UNOVARTIS | Reimagining Medicine

Novartis International AG CH-4002 Basel Switzerland

https://www.novartis.com http://x.com/NovartisNews

PRESS RELEASE

Novartis receives third FDA approval for oral Fabhalta[®] (iptacopan) – the first and only treatment approved in C3 glomerulopathy (C3G)

- Phase III study showed sustained proteinuria reduction at one year with favorable safety¹
- Fabhalta is the only oral alternative complement pathway inhibitor thought to target the underlying cause of C3G¹⁻³
- C3G is an ultra-rare kidney disease typically diagnosed in young adults and often progresses to kidney failure²⁻⁴
- Novartis continues to advance multiple kidney disease treatments with high unmet need, compounding capabilities and strengthening unique leadership presence

Basel, March 20, 2025 – Novartis today announced that oral Fabhalta[®] (iptacopan) has received U.S. Food and Drug Administration (FDA) approval for the treatment of adults with C3 glomerulopathy (C3G), to reduce proteinuria, making it the first and only treatment approved for this condition¹⁻⁴.

"C3G is a debilitating disease often affecting young people, impacting many aspects of their physical and emotional health, and our previous treatment options came with significant challenges," said Carla Nester, M.D., M.S.A., F.A.S.N., Professor of Pediatrics-Nephrology at the University of Iowa and Fabhalta APPEAR-C3G Study Co-Investigator. "This approval of Fabhalta is historic for the entire C3G community as now, for the first time, we have a therapy that is believed to treat the underlying cause of the disease, providing the potential for a new standard of care for patients."

Fabhalta is the only oral inhibitor of the alternative complement pathway to selectively target what is thought to be the underlying cause of the disease¹⁻³. Before the approval of Fabhalta, patients had to rely on supportive care, broad immunosuppression, and symptom management⁵⁻⁶.

"As someone whose family has suffered from C3G across multiple generations, it is difficult to fully express the physical and emotional challenges of living with this unrelenting disease," said Lindsey Fuller, C3G patient and Co-Leader of C3G Warriors. "To finally have an approved treatment – and one that can be taken orally – is something people with C3G have been waiting for. Today's approval brings new hope for me, my family, and so many others."

C3G is a progressive and ultra-rare kidney disease that, until now, has had no approved treatments²⁻⁵. The average age of diagnosis is around 23 years old². Prognosis is poor, with

approximately half of people living with C3G progressing to kidney failure within 10 years of diagnosis, requiring lifelong dialysis and/or kidney transplantation^{2,7}. People living with C3G may experience high levels of fatigue, mobility issues affecting everyday life activities, and mental health symptoms, including depression and anxiety^{8,9}.

Data supporting approval

The pivotal Phase III APPEAR-C3G study evaluated the efficacy and safety of twice-daily oral Fabhalta in adult patients with C3G^{1,10}. The study was comprised of a 6-month randomized, double-blind treatment period with Fabhalta compared to placebo in addition to supportive care, followed by an additional 6-month open-label treatment period where all participants received Fabhalta^{1,10}.

Treatment with Fabhalta resulted in clinically meaningful proteinuria reduction, which was seen as early as 14 days and sustained at 12 months^{1,10}. Similarly, in the open-label period, proteinuria reduction was seen in participants who switched to Fabhalta^{1,10}.

Fabhalta demonstrated a favorable safety profile, with no new safety signals¹. In patients with C3G, the most common adverse reactions (\geq 10%) with Fabhalta were nasopharyngitis and viral infections¹. Fabhalta may cause serious infections caused by encapsulated bacteria and is available only through a Risk Evaluation and Mitigation Strategy (REMS) that requires specific vaccinations¹.

Last month, Fabhalta received a positive CHMP Opinion in C3G by the European Medicines Agency (EMA)¹¹. Regulatory reviews for this indication are ongoing in China and Japan.

Transforming care in kidney disease

"We extend our deepest gratitude to the patients and investigators who participated in our clinical trials, without whom this first FDA approval in C3G wouldn't have been possible," said Victor Bultó, President US, Novartis. "With this additional approval for Fabhalta – the second in kidney disease – we will leverage our established capabilities and expertise to bring this innovative treatment to patients in need as we work to help transform care for people living with kidney diseases."

This is the third US approval for Fabhalta and its second within the Novartis kidney disease portfolio since August 2024, when Fabhalta was granted accelerated approval by the FDA for the reduction of proteinuria in adults with primary immunoglobulin A nephropathy (IgAN) at risk of rapid disease progression. Continued approval for this indication is contingent upon confirmatory evidence¹. Fabhalta received its first FDA approval in December 2023 for the treatment of adults with paroxysmal nocturnal hemoglobinuria (PNH)¹. Discovered by Novartis, Fabhalta is also being studied in a broad range of other rare kidney diseases, including atypical hemolytic uremic syndrome (aHUS), immune complex membranoproliferative glomerulonephritis (IC-MPGN) and lupus nephritis (LN). Studies are ongoing to evaluate the safety and efficacy profiles in these investigational indications.

In addition to Fabhalta, Novartis is advancing the late-stage development of two additional IgAN therapies with highly differentiated mechanisms of action: atrasentan, an investigational oral endothelin A receptor antagonist that received FDA filing acceptance in Q2 2024 with a decision anticipated in H1 2025, and zigakibart, an investigational subcutaneously administered anti-APRIL monoclonal antibody that is currently in Phase III development.

About APPEAR-C3G

APPEAR-C3G (NCT04817618) is a Phase III multicenter, randomized, double-blind, parallel group, placebo-controlled study to evaluate the efficacy and safety of twice-daily oral Fabhalta (200 mg) in patients with native kidney C3G^{1,12}. The study comprises a 6-month double-blind period in which adult patients were randomized 1:1 to receive Fabhalta or placebo on top of supportive care, followed by a 6-month open-label period in which all patients receive Fabhalta (including those who were previously on placebo)^{1,12}. The primary endpoint for the double-blind period was proteinuria reduction from baseline at 6 months for Fabhalta

compared to placebo as measured by 24-hour urine protein-creatinine ratio (UPCR)^{1,12}. In addition to the results from adult patients with C3G, enrollment is ongoing in a separate cohort of adolescent patients with C3G¹².

About C3 glomerulopathy (C3G)

Each year, approximately 1-2 people per million worldwide are newly diagnosed with C3G, a form of membranoproliferative glomerulonephritis (MPGN)³.

In C3G, overactivation of the alternative complement pathway – part of the immune system – causes deposits of C3 protein to build up in kidney glomeruli, which are a network of blood vessels that filter waste and remove extra fluids from the blood^{4,13}. This triggers inflammation and glomerular damage that results in proteinuria (protein in urine), hematuria (blood in urine) and reduced kidney function^{4,14}.

Novartis in kidney disease

Building on a 40-year legacy that began in transplant, Novartis is on a mission to empower breakthroughs and transform care in kidney health, starting with kidney conditions that have significant unmet need. Historically these conditions have had considerably less funding and research, leading to a treatment landscape largely focused on reactive or end-stage disease management, often with significant physical, emotional, and financial burdens. Our pipeline targets the underlying causes of disease, with an aim to protect kidney health and delay or prevent dialysis and/or transplantation. Our goal is to help patients get back to living life on their terms—whether at work, in school, or with loved ones, and by partnering with patients, advocates, clinicians, and policymakers we aim to raise awareness, accelerate diagnosis and get patients the right care, sooner.

Disclaimer

This press release contains forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995. Forward-looking statements can generally be identified by words such as "potential," "can," "will," "plan," "may," "could," "would," "expect," "anticipate," "look forward," "believe," "committed," "investigational," "pipeline," "launch," or similar terms, or by express or implied discussions regarding potential marketing approvals, new indications or labeling for the investigational or approved products described in this press release, or regarding potential future revenues from such products. You should not place undue reliance on these statements. Such forward-looking statements are based on our current beliefs and expectations regarding future events, and are subject to significant known and unknown risks and uncertainties. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those set forth in the forward-looking statements. There can be no guarantee that the investigational or approved products described in this press release will be submitted or approved for sale or for any additional indications or labeling in any market, or at any particular time. Nor can there be any guarantee that such products will be commercially successful in the future. In particular, our expectations regarding such products could be affected by, among other things, the uncertainties inherent in research and development, including clinical trial results and additional analysis of existing clinical data; regulatory actions or delays or government regulation generally; global trends toward health care cost containment, including government, payor and general public pricing and reimbursement pressures and requirements for increased pricing transparency; our ability to obtain or maintain proprietary intellectual property protection; the particular prescribing preferences of physicians and patients; general political, economic and business conditions, including the effects of and efforts to mitigate pandemic diseases; safety, quality, data integrity or manufacturing issues; potential or actual data security and data privacy breaches, or disruptions of our information technology systems, and other risks and factors referred to in Novartis AG's current Form 20-F on file with the US Securities and Exchange Commission. Novartis is providing the information in this press release as of this date and does not undertake any obligation to update any forward-looking statements contained in this press release as a result of new information, future events or otherwise.

About Novartis

Novartis is an innovative medicines company. Every day, we work to reimagine medicine to improve and extend people's lives so that patients, healthcare professionals and societies are empowered in the face of serious disease. Our medicines reach nearly 300 million people worldwide.

Reimagine medicine with us: Visit us at <u>https://www.novartis.com</u> and connect with us on <u>LinkedIn</u>, <u>Facebook</u>, <u>X/Twitter</u> and <u>Instagram</u>.

References

- 1. FABHALTA prescribing information. East Hanover, NJ: Novartis Pharmaceuticals Corp; March 2025.
- Martín B, Smith RJH. In: Adam MP, Feldman J, Mirzaa GM, et al., editors. C3 Glomerulopathy. GeneReviews® [Internet]. Updated 2018. University of Washington, Seattle; 1993-2024. Available from: <u>https://www.ncbi.nlm.nih.gov/books/NBK1425/</u>. Accessed February 2025.
- Schena FP, Esposito P, Rossini M. A Narrative Review on C3 Glomerulopathy: A Rare Renal Disease. Int J Mol Sci. 2020;21(2):525.
- 4. Caravaca-Fontán F, Lucientes L, Cavero T, Praga M. Update on C3 Glomerulopathy: A Complement-Mediated Disease. *Nephron.* 2020;144(6):272-280.
- Kidney Disease: Improving Global Outcomes (KDIGO) Glomerular Diseases Work Group. KDIGO 2021 Clinical Practice Guideline for the Management of Glomerular Diseases. *Kidney Int.* 2021;100(4S):S1-S276. doi:10.1016/j.kint.2021.05.021
- 6. National Kidney Foundation. Treatment for C3G. National Kidney Foundation. Available from: https://www.kidney.org/kidney-topics/treatment-c3g. Accessed February 2025.
- Smith RJH, Appel GB, Blom AM, et al. C3 Glomerulopathy understanding a rare complement-driven renal disease. *Nat Rev Nephrol.* 2019;15(3):129-143.
- Feldman DL, Bomback A, Nester C. Voice of the patient: report of externally led patient-focused drug development meeting on Complement 3 Glomerulopathy (C3G). National Kidney Foundation. Published March 26, 2018. Available from: <u>https://www.kidney.org/sites/default/files/C3G_EL-PFDD_VoP-Report_3-29-18.pdf</u>. Accessed February 2025.
- 9. Lafayette R, Sidhu R, Proudfoot C, et al. Quality of life and fatigue burden in individuals living with Complement 3 Glomerulopathy a real-world study. *Nephrol Dial Transplant.* 2024;39(Suppl 1).
- Smith RJ, Kavanagh D, Vivarelli M, et al. Efficacy and safety of iptacopan in patients with C3 glomerulopathy: 12-Month results from the Phase 3 APPEAR-C3G study. Presented at American Society of Nephrology (ASN) Kidney Week 2024; October 23-27, 2024; San Diego, CA.
- Novartis. Novartis oral Fabhalta® (iptacopan) receives positive CHMP opinion for the treatment of adults living with C3 glomerulopathy (C3G). Available from: <u>https://www.novartis.com/news/media-</u> <u>releases/novartis-oral-fabhalta-iptacopan-receives-positive-chmp-opinion-treatment-adults-living-c3-</u> <u>glomerulopathy-c3g.</u> Accessed March 2025.
- ClinicalTrials.gov. Study of Efficacy and Safety of Iptacopan in Patients With C3 Glomerulopathy. (APPEAR-C3G). Available from: <u>https://clinicaltrials.gov/study/NCT04817618</u>. Accessed February 2025.
- 13. Ravindran A, Fervenza FC, Smith RJH, Sethi S. C3 Glomerulopathy Associated with Monoclonal Ig is a Distinct Subtype. *Kidney Int.* 2018;94(1):178-186.
- 14. Medjeral-Thomas NR, O'Shaughnessy MM, O'Regan JA, et al. C3 Glomerulopathy: Clinicopathologic Features and Predictors of Outcome. *Clin J Am Soc Nephrol.* 2014;9(1):46-53.

###

Novartis Media Relations

E-mail: media.relations@novartis.com

Novartis Investor Relations

Central investor relations line: +41 61 324 7944 E-mail: investor.relations@novartis.com